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Claims

- 1. Process for the depolymerization of glycosaminoglycanes characterized by the use of electron-beam radiation.
- 2. Process according to claim 1 performed by using a dynamic irradiation process.
- 3. Process according to claims 1-2 wherein the glycosaminoglycane is heparin.
- 4. Process according to claims 1-3 wherein the electron-beam radiation has an energy comprised between 100 and 1000 keV.
- 5. Process according to claims 1-4 wherein the process is performed in aqueous solution.
 - Process for the depolymerization of glycosaminoglycanes according to
 claim 5 in the presence of an organic compound represented by formulas I, II and III:

wherein each R is independently selected from the group consisting of H, OH, CHO, C₁-C₆ alkyl and acyl, optionally substituted by oxygen atoms; two R groups optionally join together to form a ring.

- 7. Process according to claim 6 wherein the organic compound is selected from the group consisting of methanol, ethanol, n-propanol, isopropanol, n-butanol, isobutanol, glycerol, tetrahydrofurane, dioxane, diethylether, tertbutylmethylether, dioxolane, formaldehyde, glyoxal, acetaldehyde, N,N-dimethylformamide, N,N-diethylformamide, N-methylpyrrolidone.
- 8. Process according to claims 6-7 wherein the amount of organic compound varies between 0.1 and 5%.
- Process according to claims 1-7 wherein the amount of radiation used is comprised between 400 and 8,000 kGy.

10. Glycosaminoglycanes obtainable by the process of claims 1-9.

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